

Notice of Allowability

Application No.

10/821,054

Examiner

Vincent Lai

Applicant(s)

EISEN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Remarks submitted 12 March 2007.
2. ☒ The allowed claim(s) is/are 1-3, 5-21, and 23-36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 8 April 2004 was considered by the examiner.

Response to Amendment

2. The 35 USC 101 rejections are withdrawn after considering amendments.

It is noted that the withdrawal of the 35 USC 101 rejection of claim 6 is due to further inspection of the Examiner, who now deems "calculating...to complete instruction" as statutory. Applicant had not addressed this claim regarding not having a "real or tangible end result."

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Voigt on 22 May 2007. The communications were done via telephone voicemails.

Claim 6:

A method for tracking a larger number of outstanding instructions in a completion table of a processor comprising the steps of:

issuing instructions to a first and a second execution unit;

selecting an identification of one of a finished instruction and an active instruction at one of said first and said second execution unit;

calculating an identification of a next to complete instruction using said selected identification of said one of said finished instruction and said active instruction;

selecting an instruction address and an identification of a first of a consecutive number of outstanding instructions located in an entry of said completion table; and

calculating an instruction address of said next to complete instruction using said identification of said next to complete instruction and said selected instruction address and identification of said first of said consecutive number of outstanding instructions located in said entry of said completion table.

Allowable Subject Matter

4. Claims 1-3, 5-21, and 23-36 are allowed.

The primary reasons for allowance of claim 1 is in the instant application rest at least in the combination with the inclusion of the limitation that "a processor comprising a completion table...wherein an instruction address and an identification of a next to

complete instruction is calculated using said instruction address of said first of said consecutive number of outstanding instructions and said identification of said first of said consecutive number of outstanding instructions, respectively, in a selected entry of said completion table.” The prior art of record neither anticipates nor renders obvious the above-recited combination.

Because claims 2, 3, and 5 depend directly or indirectly on any of the claim 1, these claims are considered allowable for at least the same reasons noted above with respect to claim 1.

The primary reasons for allowance of claim 6 is in the instant application rest at least in the combination with the inclusion of the limitation that “A method for tracking a larger number of outstanding instructions in a completion table of a processor comprising the steps of... using said identification of said next to complete instruction.” The prior art of record neither anticipates nor renders obvious the above-recited combination.

Because claims 7-20 depend directly or indirectly on any of the claim 6, these claims are considered allowable for at least the same reasons noted above with respect to claim 6.

The primary reasons for allowance of claim 21 in the instant application rest at least in the combination with the inclusion of the limitation that “a processor comprising...an instruction address of said next to complete instruction using said

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identification of said next to complete instruction and selected instruction address and identification of first of said consecutive number of outstanding instructions in a selected entry of said completion table." The prior art of record neither anticipates nor renders obvious the above-recited combination.

Because claims 23-26 depend directly or indirectly on any of the claim 21, these claims are considered allowable for at least the same reasons noted above with respect to claim 21.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Lai whose telephone number is (571) 272-6749. The examiner can normally be reached on M-F 8:00-5:30 (First BiWeek Friday Off).

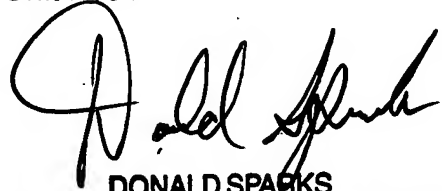
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vincent Lai
Examiner
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vi
May 26, 2007



DONALD SPARKS
SUPERVISORY PATENT EXAMINER